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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,934	09/16/2003	Ravi Prasad	HOETRE24ACON	2322
270	7590	10/27/2005	EXAMINER	
HOWSON AND HOWSON ONE SPRING HOUSE CORPORATION CENTER BOX 457 321 NORRISTOWN ROAD SPRING HOUSE, PA 19477			HON, SOW FUN	
			ART UNIT	PAPER NUMBER
			1772	
DATE MAILED: 10/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Advisory Action</b> <b>After the Filing of an Appeal Brief</b>	Application No.	Applicant(s)	
	10/663,934	PRASAD, RAVI	
	Examiner	Art Unit	
	Sow-Fun Hon	1772	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The reply filed 18 October 2005 is acknowledged.

1. ☐ The reply filed on or after the date of filing of an appeal brief, but prior to a final decision by the Board of Patent Appeals and Interferences, will not be entered because:

a. ☐ The amendment is not limited to canceling claims (where the cancellation does not affect the scope of any other pending claims) or rewriting dependent claims into independent form (no limitation of a dependent claim can be excluded in rewriting that claim). See 37 CFR 41.33(b) and (c).

b. ☐ The affidavit or other evidence is not timely filed before the filing of an appeal brief.  
See 37 CFR 41.33(d)(2).

2. ☐ The reply is not entered because it was not filed within the two month time period set forth in 37 CFR 41.39(b), 41.50(a)(2), or 41.50(b) (whichever is appropriate). Extensions of time under 37 CFR 1.136(a) are not available.

Note: This paragraph is for a reply filed in response to one of the following: (a) an examiner's answer that includes a new ground of rejection (37 CFR 41.39(a)(2)); (b) a supplemental examiner's answer written in response to a remand by the Board of Patent Appeals and Interferences for further consideration of rejection (37 CFR 41.50(a)(2)); or (c) a Board of Patent Appeals and Interferences decision that includes a new ground of rejection (37 CFR 41.50(b)).

3. ☒ The reply is entered. An explanation of the status of the claims after entry is below or attached.

4. ☒ Other: Attachment to advisory action

**ADVISORY ACTION**

***Entry of Amendment***

1. The newly proposed amendment has been entered because it removes an issue from appeal, obviating the 35 U.S.C. 112, 2<sup>nd</sup> paragraph rejection in the final Office action dated 04/19/05, and does not necessitate new grounds of rejection, for the reasons set forth below.
2. The newly proposed amendment further defines the coextruded polymeric substrate consisting of a first surface of a maleic anhydride modified polyolefin layer and a second surface of a selected polyolefin layer; as being a coextruded polymeric substrate consisting of a first outer surface of a maleic anhydride modified polyolefin layer and a second outer surface of a selected polyolefin layer, the clarifying new limitation being “outer” which is not new matter and is consistent with the description of the two layers in Applicant’s specification (page 2, lines 1-15). Since the newly proposed amendment is consistent with the Office’s interpretation as indicated in the final Office action wherein the Office states that the rejections of the 12/15/04 claims are based on the description of the two layers in page 2, lines 1-15 of Applicant’s specification (See paragraph 3 of the final Office action), the grounds of rejection in the final Office action still stand, and the newly entered limitation of “outer” is considered to be inherent in the grounds of rejection previously of record in the final Office action.
3. Pursuant to MPEP 1207, the individual rejections are now restated with the newly entered limitation of “outer”, as set forth below, in order to make clear how the individual

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rejections set forth in the final Office action will be used to reject the amended claims in the examiner's answer.

***Claim Rejections Restated***

4. Claims 10, 13-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hubbard (US 5,882,798) in view of Adur (US 4,957,968) and Krueger (US 4,552,714), as evidenced by Alger (Polymer Science Dictionary, 2<sup>nd</sup> edition).

Regarding claims 10, 23-24, Hubbard teaches a coated polymeric article comprising a polysilicate coating (column 4, lines 20-30) on a selected polyolefin layer (particularly polypropylene substrate) (column 4, lines 34-44), and a polymeric layer (primer, column 4, lines 53-61) between the selected polyolefin layer (polypropylene substrate) and the coating to provide suitable wetting of the polysilicate coating on the polyolefin layer (column 4, lines 53-61). Thus Hubbard teaches a coated polymeric article comprising (a) a polymeric substrate consisting of a first outer surface of a polymeric (primer) layer and a second outer surface of a selected polyolefin layer (polypropylene), and (b) a polysilicate coating on the primer layer. The polymeric article can be a polymeric film (column 4, lines 40-45).

Hubbard fails to teach that the first outer surface of the polymeric (primer) layer primer layer is the first outer surface of a maleic anhydride modified polyolefin layer.

Adur teaches that surfaces of polyolefins such as polypropylene require a proper primer to adhere to glass surfaces, and has a composition comprising a polyolefin, which is adherent to glass and polyolefins (column 1, lines 5-20). Adur provides

commercially available polypropylene grafted with maleic anhydride is one example (column 4, lines 1-12). Glass is polysilicate, as evidenced by Alger.

Alger teaches that silicate glasses are also known as polysilicates (silicate polymer section, pp 520-521).

Thus Adur, as evidenced by Alger, teaches a second surface of a selected polyolefin (polypropylene) layer primed with the first surface of a maleic anhydride modified polyolefin (polypropylene) layer in order to adhere to a polysilicate (glass) surface.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used the maleic anhydride modified polyolefin layer of Adur as the first outer surface (primer) layer of Hubbard, in order to obtain a polysilicate coated polyolefin article with good adhesion of the polysilicate coating to the polyolefin substrate.

Hubbard in view of Adur, as evidenced by Alger, fails to teach that the polymeric substrate consisting of a first outer surface of maleic anhydride modified polyolefin layer and a second outer surface of a selected polyolefin layer, is coextruded.

Krueger teaches that a layer of polyolefin (polypropylene) is coextruded with a layer of maleic anhydride modified polyolefin (polypropylene), wherein the maleic anhydride modified polyolefin is used as an adhesive layer (column 1, lines 55-60). Kruger demonstrates that coextrusion provides a one-step process in the formation of the maleic anhydride modified polyolefin/polyolefin substrate, wherein the maleic anhydride modified polyolefin layer functions as a primer a.k.a adhesive layer.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have coextruded the polymeric substrate of Hubbard in view of Adur, as evidenced by Alger, consisting of a first outer surface of the maleic anhydride modified polyolefin layer and a second outer surface of the selected polyolefin layer, in order to provide the bilayer polymeric substrate in one step, as taught by Krueger.

Although Hubbard in view of Adur and Krueger, as evidenced by Alger, fails to teach the oxygen transmission rate of the article, where the claimed and prior art products are identical or substantially identical in structure and composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established and the claimed properties are presumed to be inherent. See MPEP 2112.01[R-2]. In the instant case, the polysilicate coated, coextruded maleic anhydride modified polyolefin primer/polyolefin substrate of Hubbard in view of Adur and Krueger, as evidenced by Alger, is expected to have the claimed oxygen transmission rate within the range of 3 to 15 cc/m<sup>2</sup>/day, not only by virtue of the same chemical composition, but also by virtue of the laminate structure, and process of making.

Regarding claim 13, Hubbard teaches that bottles are much thicker than films, typically 14 mil in wall thickness (column 16, lines 1-5), meaning that higher substrate thicknesses provide more structural support in order to obtain free-standing articles such as bottles. Therefore although Hubbard fails to teach the claimed thickness range of from about 20 to about 50 mil, it would have been obvious to one of ordinary skill in

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the art at the time the invention was made, to have used a substrate thickness within the range of 20 to about 50 mil, in order to provide the desired structural support for the article.

Regarding claims 14-15, Hubbard teaches that the article can be a polymer film (column 2, line 10), which is biaxially oriented (column 17, lines 30-35).

Regarding claim 16, Hubbard teaches that the substrate can have a thickness of 1.2 mil (column 8, lines 60-65), which is within the claimed range of between about 0.5 to 2 mil prior to coating.

Regarding claims 17, 22, Hubbard teaches that the article can be a bottle, jar, lidlock (lidstock) or blister pack (column 4, lines 45-50).

Regarding claim 18, Hubbard teaches that the selected polyolefin is polypropylene (column 17, lines 30-35).

Regarding claims 19, 25, Hubbard teaches that the polysilicate coating on a thin film has the claimed thickness of between 200 to 500 nm (column 4, lines 7-8), wherein 500 nm is 0.5  $\mu\text{m}$ , and that the thickness can also be adjusted by one of ordinary skill in the art to go up to about 1.0  $\mu\text{m}$  (1000 nm, column 4, lines 10-12), thus meeting the claimed range of thickness from about 0.5  $\mu\text{m}$ .

Regarding claim 20, Hubbard teaches that the polysilicate coating comprises a lithium polysilicate (column 3, lines 30-35).

Regarding claims 21, 26, Hubbard teaches that the polysilicate coating comprises a lithium-potassium copolysilicate (column 4, lines 20-25).

5. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hubbard in view of Adur and Krueger, as evidenced by Alger, as applied to claims 10, 13-26 above, and further in view of Jones (US 3,442,686).

Hubbard in view of Adur and Krueger, as evidenced by Alger, teaches a coated article comprising: (a) a coextruded polymeric substrate consisting of a first outer surface of a maleic anhydride modified polyolefin layer and a second outer surface of a selected polyolefin layer; and (b) a polysilicate coating on the maleic anhydride modified layer, as discussed above. Hubbard in view of Adur and Krueger, as evidenced by Alger, fails to teach a topcoat of nitrocellulose on the coated article.

Jones teaches a silicate (silicon monoxide) coated film of biaxially oriented polypropylene (column 8, lines 1-6) whereby the sealable topcoat provides a synergistic effect on initial barrier properties (column 4, lines 60-68) to gas and liquid (abstract). A preferred sealable topcoat is nitrocellulose (column 5, lines 29-33). The silicate (silicon oxide) coatings are transparent flexible coatings in the glassy state (flexible glass) (column 1, lines 10-20).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided a topcoat of nitrocellulose, taught by Jones, to the polysilicate coated coextruded polyolefin substrate of Hubbard in view of Adur and Krueger, as evidenced by Alger, in order to obtain synergistically improved barrier properties for the laminate.



***Status of Claims***

6. For the purposes of appeal, the status of the claims is as follows: no claims are withdrawn, no claims are allowed, claims 10-26 are rejected, and no claims are objected to.

***Arguments***

7. It is noted that while Applicant indicated in the remarks section dated 10/18/05, that Applicant had already traversed the rejections in the final Office action in the previous response dated 12/15/04, the previous response only addressed withdrawn rejections over Jianella as evidenced by Alger; Hubbard in view of Adur, and Hubbard in view of Adur and Jones. The rejections in the final Office action are over Hubbard in view of Adur and Krueger, as evidenced by Alger; and Hubbard in view of Adur, Krueger and Jones, as evidenced by Alger, and Applicant has therefore not addressed the new rejections.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

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*S. Hon*

Sow-Fun Hon

*10/24/05*

*[Signature]*  
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*1112*

*10/24/05*